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## UTILITY PATENT APPLICATION TRANSMITTAL (Only for new nonprovisional applications under 37 C.F.R. § 1.53(b) Express Mail Label No.

PD-02W102 Attorney Docket No. First Inventor or Application Identifier DELMAR L. BARKER HIGH DENSITY STORAGE OF EXCITED ......

EV 291142355 US

| APPLICATION ELEMENTS See MPEP chapter 600 concerning utility patent application contents.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | ADDRESS TO: Assistant Commissioner for Patents Box Patent Application Washington, DC 20231                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
| * Fee Transmittal Form (e.g., PTO/SB/17) (Submit an original and a duplicate for fee processing)  2. Specification [Total Pages] 34 (preferred arrangement set forth below)  - Descriptive title of the Invention - Cross References to Related Applications - Statement Regarding Fed sponsored R & D - Reference to Microfiche Appendix - Background of the Invention - Brief Summary of the Invention - Brief Description of the Drawings (if filed) - Detailed Description - Claim(s) - Abstract of the Disclosure  3. Drawing(s) (35 U.S.C. 113) [Total Sheets]  4. Oath or Declaration [Total Pages]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Microfiche Computer Program (Appendix)  6. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)  a. Computer Readable Copy  b. Paper Copy (identical to computer copy)  c. Statement verifying identity of above copies  ACCOMPANYING APPLICATION PARTS  7. Assignment Papers (cover sheet & document(s))  37 C.F.R.§3.73(b) Statement Power of (when there is an assignee)  9. English Translation Document (if applicable)  10. Information Disclosure Statement (IDS)/PTO-1449  11. Preliminary Amendment  Return Receipt Postcard (MPEP 503) |  |  |  |  |
| a. Newly Executed Combined Declaration and Power of Attorney b. Copy from a prior application (37 C.F.R. § 1.63(d)) (for continuation/divisional with Box 16 completed) i. DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) named in the prior application, see 37 C.F.R. §§ 1.63(d)(2) and 1.33(b).  *Note for Items 1 & 13: IN ORDER TO BE ENTITLED TO PAY SMALL ENTITY FLES, A SMALL ENTITY STATEMENT IS REQUIRED (37 C.F.R. § 1.27), EXCEPT IF ONE FILED IN A PRIOR APPLICATION IS RELIED UPON (37 C.F.R. § 1.29).  16. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment:  Continuation Divisional Continuation-in-part (CIP) of prior application No:  Prior application information: Examiner  For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 4b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The Incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |  |  |  |
| Customer Number or Bar Code Label                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | or Correspondence address below                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |  |  |  |
| Name Patent Docket Administration RAYTHEON COMPANY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |  |  |  |
| Address Bldg. EO/E4/N119 P.O. Box 902                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |  |  |  |
| City El Segundo State                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | California Zip Code 90245                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |
| Country United States of America Telephone                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | (520) 794.7980 Fax (520) 794-8171                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |  |
| Name (PrintType) Thoynas J. Finn                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Registration No. (Attorney/Agent) 48,066                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |
| Signature Shomas . Zi                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Date 7-79-03                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |  |  |

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TRANSMITTA for FY 2003

Effective 01/01/2003. Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

Thomas J. Finn

Name (Print/Type)

Signature

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| Co                            | omplete if Known                                       |
| Application Number            | NOT YET ASSIGNED                                       |
| Filing Date                   | HEREWITH                                               |
| First Named Inventor          | DELMAR L. BARKER                                       |
| Examiner Name                 | NOT YET ASSIGNED                                       |
| Art Unit                      | NOT YET ASSIGNED                                       |
| Attorney Docket No.           | PD-02W102                                              |

Telephone 520.794.7980

Date

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| METHOD OF PAYMENT (check all that apply)                                                                  |                      | FEE CALCULATION (continued) |               |                                                                            |          |
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| Check Credit card Money Other None                                                                        | 3. ADDITIONAL FEES   |                             |               |                                                                            |          |
| Order Order                                                                                               | Large Entit          | y   Smal                    | <b>Entity</b> |                                                                            | 1        |
| Deposit Account 50-0888                                                                                   | Fee Fee<br>Code (\$) | Fee<br>Code                 | Fee<br>(\$)   | Fee Description                                                            | Fee Paid |
| Number                                                                                                    | 1051 130             | 2051                        | 65            | Surcharge - late filing fee or oath                                        |          |
| Deposit<br>Account<br>Name                                                                                | 1052 50              | 2052                        | 25            | Surcharge - late provisional filing fee or cover sheet                     |          |
| The Commissioner is authorized to: (check all that apply)                                                 | 1053 130             | 1053                        |               | Non-English specification                                                  |          |
| Charge fee(s) indicated below Credit any overpayments                                                     | 1812 2,52            | 0 1812                      | 2,520         | For filing a request for ex parte reexamination                            | <u> </u> |
| Charge any additional fee(s) during the pendency of this application                                      | 1804 92              | 0* 1804                     | 920*          | Requesting publication of SIR prior to<br>Examiner action                  |          |
| Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.         | 1805 1,84            | 0* 1805                     | 1,840*        | Requesting publication of SIR after<br>Examiner action                     |          |
| FEE CALCULATION                                                                                           | 1251 11              | 0 2251                      | 55            | Extension for reply within first month                                     |          |
| 1. BASIC FILING FEE                                                                                       | 1252 41              | 0 2252                      | 205           | Extension for reply within second month                                    | ]        |
| Large Entity Small Entity                                                                                 | 1253 93              | 0 2253                      | 465           | Extension for reply within third month                                     |          |
| Fee Fee Fee Fee Fee Description Fee Paid Code (\$) Code (\$)                                              | 1254 1,45            | 0 2254                      | 725           | Extension for reply within fourth month                                    |          |
| 1001 750 2001 275   Hilliby Sting for                                                                     | 1255 1,97            | 0 2255                      | , 985         | Extension for reply within fifth month                                     |          |
| 1002 330 2002 165 Design filing fee 750.00                                                                | 1401 32              | 0 2401                      | 160           | Notice of Appeal                                                           |          |
| 1003 520 2003 260 Plant filing fee                                                                        | 1402 32              | 0 2402                      | 160           | Filing a brief in support of an appeal                                     |          |
| 1004 750 2004 375 Reissue filing fee                                                                      | 1403 28              | 0 2403                      | 140           | Request for oral hearing                                                   |          |
| 1005 160 2005 80 Provisional filing fee                                                                   | 1451 1,51            | 0 1451                      | 1,510         | Petition to institute a public use proceeding                              |          |
| SUBTOTAL (1) (\$) 750.00                                                                                  | 1452 11              | 0 2452                      | 2 55          | Petition to revive - unavoidable                                           |          |
|                                                                                                           | 1453 1,30            | 0 2453                      | 650           | Petition to revive - unintentional                                         |          |
| 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE                                                               | 1501 1,30            | 0 2501                      | 650           | Utility issue fee (or reissue)                                             |          |
| Extra Claims below Fee Paid  Total Claims 43 -20** = 23 x 18.0 = 414.                                     | 1502 47              | 0 2502                      | 235           | Design issue fee                                                           |          |
| Independent                                                                                               | 1503 63              | 0 2503                      | 315           | Plant issue fee                                                            |          |
| Claims Multiple Dependent 9 - 3** = 6 X 84.0 = 504                                                        | 1460 13              | 0 1460                      | 130           | Petitions to the Commissioner                                              | [        |
|                                                                                                           | 1807 5               | 0 180                       | 7 50          | Processing fee under 37 CFR 1.17(q)                                        |          |
| Large Entity   Small Entity Fee Fee Fee Fee Fee Description                                               | 1806 18              | 0 180                       |               | Submission of Information Disclosure Stmt                                  |          |
| Code (\$) Code (\$)                                                                                       | 8021 4               | 0 802                       | 1 40          | Recording each patent assignment per property (times number of properties) | 40.00    |
| 1202 18 2202 9 Claims in excess of 20                                                                     | 1809 75              | 0 280                       | 9 375         | Filing a submission after final rejection                                  |          |
| 1201 84 2201 42 Independent claims in excess of 3 1203 280 2203 140 Multiple dependent claim, if not paid | ,<br>1810 75         | 0 281                       | 0 275         | (37 CFR 1.129(a)) For each additional invention to be                      |          |
| 1204 84 2204 42 ** Reissue independent claims                                                             | 1010 73              | 201                         | 0 3/3         | examined (37 CFR 1.129(b))                                                 |          |
| over original patent                                                                                      | 1801 75              | 0 2801                      | 375           | Request for Continued Examination (RCE)                                    |          |
| 1205 18 2205 9 ** Reissue claims in excess of 20 and over original patent                                 | 1802 90              | 0 1802                      | 900           | Request for expedited examination     of a design application              | ł        |
| - 01000                                                                                                   | Other fee (          | specify)                    |               |                                                                            |          |
| SUBTOTAL (2) (\$) 918.00 **or number previously paid, if greater; For Reissues, see above                 | *Reduced             |                             | Filing F      | ee Paid SUBTOTAL (3) (\$) 40.00                                            |          |
|                                                                                                           |                      |                             |               |                                                                            |          |
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